

CLAIMS:

1. An isolated nucleic acid molecule comprising a sequence selected from the group consisting of:

(a) a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 and 25;

(b) a complement of a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25;

(c) a sequence consisting of at least 10 contiguous nucleotides of a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25 or complementary form thereof;

(d) a sequence which hybridizes to the complement of a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25, under conditions of low stringency;

(e) a sequence having at least 70% identity after optimal alignment to a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25;

(f) a derivative of a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25; and

(g) a homolog of a sequence provided in SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 or 25.

2. A vector comprising a nucleic acid molecule of Claim 1 operably linked to an expression control sequence.

3. The vector of Claim 2, wherein the vector is an artificial chromosome.

4. The vector of Claim 3, wherein the vector is an artificial human chromosome.

5. A host cell transformed or transfected with the vector of Claim 2 or 3 or 4.

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6. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:
 - (a) a sequence provided in SEQ ID NOs:2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 27 and 28;
 - (b) a sequence having at least 70% similarity after optimal alignment to an amino acid sequence provided in SEQ ID NOs:2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 27 and 28;
 - (c) a derivative, homolog, analog, chemical equivalent or mimetic of a sequence provided in SEQ ID NOs:2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 27 and 28;
 - (d) a sequence encoded by a nucleic acid molecule of Claim 1; and
 - (e) a sequence having at least 70% similarity after optimal alignment to a sequence encoded by a nucleic acid molecule of Claim 1.
7. A vector comprising a nucleic acid molecule which encodes a polypeptide of Claim 6 operably linked to an expression control sequence.
8. The vector of Claim 7, wherein the vector is an artificial chromosome.
9. The vector of Claim 8, wherein the vector is a human artificial chromosome.
10. A host cell transformed or transfected with the vector of Claim 7 or 8 or 9.
11. An isolated immunointeractive molecule which specifically binds to a polypeptide of Claim 6 or an immunogenic fragment thereof.
12. The immunointeractive molecule of Claim 11, wherein the molecule is an antibody or an antigen binding fragment thereof.

13. The isolated antibody of Claim 12, wherein said antibody is selected from a polyclonal antibody, a monoclonal antibody, a humanized antibody or a deimmunized antibody.

14. The antibody of Claim 12 or Claim 13 conjugated to an immunotoxin.

15. A composition comprising a first component selected from the group consisting of:

- (a) a nucleic acid molecule of Claim 1;
- (b) a polypeptide of Claim 6; and
- (c) an immunointeractive molecule of Claim 11 or 12 or 13,

and a second component selected from a pharmaceutical carrier, diluent and an immunostimulant.

16. A method for detecting the presence of a disease or condition in a subject, comprising the steps of:

- (a) obtaining a biological sample from said subject;
- (b) contacting said biological sample with an molecule that binds to a nucleic acid molecule of Claim 1 or a polypeptide Claim 6;
- (c) detecting in said biological sample the presence of binding of said molecule; and
- (d) comparing the presence of bound molecule with a pre-determined cut-off value to make a determination as to the presence or absence of a disease or condition in said subject.

17. The method of Claim 16, wherein said disease or condition is AML.

18. The method of Claim 16, wherein said molecule is an antibody.

19. A method for detecting a target cell which produces a member of the 35-LM family of proteins, comprising the steps of:

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- (a) obtaining a sample comprising cells;
- (b) contacting said sample with an molecule that binds to a member of the 35-LM family of proteins; and
- (c) detecting the presence of a target cell conjugated to said molecule specific for a member of the 35-LM family of proteins.

20. The method of Claim 19, wherein the 35-LM protein is selected from the group consisting of 35-L1, 35-L2, 35-L3, 35-L4 and 35-L5.

21. The method of Claim 19, wherein the target cell is of myeloid lineage.

22. The method of Claim 21, wherein the myeloid cell is selected from a monocyte, a macrophage, a dendritic cell and a stem cell.

23. The method of Claim 22, wherein said dendritic cell is CD11c⁺.

24. A method for assessing a disease or condition including the ability for a subject to mount an immune response, said method comprising determining the level or pattern of expression of the nucleic acid molecule in Claim 1, wherein the pattern of presence or absence of expression correlates with a disease condition, a propensity for developing a disease condition and/or an ability for a subject to maintain an immune response.

25. A method for assessing a disease or condition including the ability for a subject to mount an immune response, said method comprising determining the level or pattern of the protein in Claim 6, wherein the pattern of presence or absence or level of said protein correlates with a disease condition, a propensity for developing a disease condition and/or an ability for a subject to maintain an immune response.

26. The method of Claim 24 or Claim 25, wherein said disease or condition is selected from cancer or a genetic disorder or an inflammatory disease.